



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,022	03/19/2001	Richard L. Vogel	15-0208	9335
23446	7590	10/24/2005	EXAMINER	
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			SAM, PHIRIN	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/812,022	Applicant(s) VOGEL ET AL.	
	Examiner Phirin Sam	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 and 47-52 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 50-52 is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-16, 21-28, 31-36 and 47 is/are rejected.
- 7) ☒ Claim(s) 9, 10, 17-20, 29, 30, 37-40, 48 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

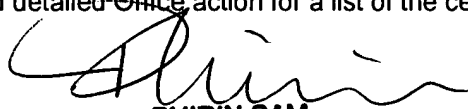
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


PHIRIN SAM
PRIMARY EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-8, 11-16, 21-28, 31-36, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,366,761 (hereinafter referred as "Montpetit") in view of US Pub. 2002/0003776 (hereinafter referred as "Gokhale").

Montpetit discloses the invention (**amended claims 1 and 21**) as claimed including a method of allocating uplink bandwidth among user terminals in a satellite communication system including an uplink, the method comprising:

- (a) assigning initial bandwidth allocations of the uplink bandwidth for one or more of the user terminals (see Figs. 5 and 10, element 85, col. 7, lines 41-48, 64-67, col. 8, lines 1-5, 32-41, and col. 13, lines 33-34);

Art Unit: 2661

(b) releasing uplink bandwidth previously allocated to one or more of the user terminals based on a projected release time associated with completing transmission of data in a buffer of the one or more user terminals (see Fig. 10, element 85, col. 17, lines 48-58);

Montpetit silent on assigning fair shares of the uplink bandwidth allocated to one or more of the user terminals based on at least one of system data loading, terminal data loading, and user agreement terms. However, Gokhale discloses assigning fair shares of the uplink bandwidth allocated to one or more of the user terminals based on at least one of system data loading, terminal data loading, and user agreement terms (see paragraph [0004] on page 1). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine assigning fair shares of the uplink bandwidth allocated to one or more of the user terminals based on at least one of system data loading, terminal data loading, and user agreement terms teaching by Gokhale with Montpetit. The motivation for doing so would have been to provide to reduce the delay of the sending packets and shaping data traffic and improve utilization of uplink bandwidth read on paragraphs [0008] and [0010]. Therefore, it would have been obvious to combine Gokhale and Montpetit to obtain the invention as specified in the claim1.

Regarding claims 2 and 22, Montpetit discloses the assigning initial bandwidth allocations comprises:

- (a) determining initial bandwidth needs at one or more of said user terminals in response to data activity at said one or more user terminals (see Fig. 5, col. 7, lines 41-48, and col. 8, lines 1-5);
- (b) transmitting initial bandwidth requests from one or more of the user terminals to the bandwidth manager (see Fig. 5, col. 8, lines 20-22);

Art Unit: 2661

(c) transmitting the initial bandwidth allocations to one or more of the user terminals (see Fig. 6, col. 9, lines 12-16).

Regarding claims 3 and 23, Montpetit discloses the uplink comprises at least one allocated signaling channel and wherein transmitting initial bandwidth requests comprises communicating over the allocated signaling channel (see Figs. 7 and 10, element 85, col. 13, lines 42-46).

Regarding claims 4 and 24, Montpetit discloses transmitting initial bandwidth requests comprises communicating over the initial bandwidth allocations in the uplink (see Fig. 9, col. 11, lines 61-67, and col. 12, lines 1-5).

Regarding claims 5, 14, and 25, Montpetit discloses the satellite communication system is arranged to transmit data via a fixed bandwidth, and wherein the method further comprises identifying the need for a fixed bandwidth based on the data to be transmitted over the satellite communication system (see Fig. 6, col. 9, lines 40-52). Wherein the requested bandwidth is the fixed bandwidth and if the terminal receive data packet from the network is greater than the allocated transmission bandwidth (exceed the threshold), the terminal requests additional uplink bandwidth to accommodate the increased rate read on column 9, lines 16-25. Therefore, the request bandwidth is usually is fixed.

Regarding claims 6 and 26, Montpetit discloses transmitting initial bandwidth requests comprises transmitting initial minimal bandwidth allocation requests based on the data to be transmitted over the satellite communication system (see Fig. 6, col. 9, lines 5-7).

Regarding claims 7, 8, 15, 16, and 47, Montpetit does not disclose fair share of the uplink bandwidth. However, Gokhale discloses fair share of the uplink bandwidth (see paragraph

Art Unit: 2661

[0004] on page 1). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine fair share of the uplink bandwidth teaching by Gokhale with Montpetit. The motivation for doing so would have been to provide to reduce the delay of the sending packets and shaping data traffic and improve utilization of uplink bandwidth read on paragraphs [0008] and [0010]. Therefore, it would have been obvious to combine Gokhale and Montpetit to obtain the invention as specified in the claims 7, 8, 15, 16, and 47.

Regarding claims 11 and 31, Montpetit discloses transmitting initial bandwidth requests comprises combining the initial bandwidth request of a first terminal of said user terminals with initial data to be transferred by the first terminal (see Fig. 6, col. 9, lines 5-8).

Regarding claims 12 and 32, Montpetit discloses transmitting the initial bandwidth allocations to the one or more user terminals further comprises transmitting the initial bandwidth allocations from the bandwidth manager (see Fig. 10 and 11b, col. 17, lines 31-39).

Regarding claims 13 and 33, Montpetit discloses the satellite communication system comprises a downlink and wherein transmitting the initial bandwidth allocations to the one or more user terminals comprises communicating over a signaling channel allocated in the downlink to said one or more user terminals (see Fig. 10, col. 17, lines 31-39).

Regarding claims 27, 28, and 34-36, Montpetit does not disclose allocated fair share of the uplink bandwidth. However, Gokhale discloses allocated fair share of the uplink bandwidth (see paragraph [0004] on page 1). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine allocated fair share of the uplink bandwidth teaching by Gokhale with Montpetit. The motivation for doing so would have been to provide to reduce the delay of the sending packets and shaping data traffic and improve utilization of uplink

Art Unit: 2661

bandwidth read on paragraphs [0008] and [0010]. Therefore, it would have been obvious to combine Gokhale and Montpetit to obtain the invention as specified in the claims 27, 28, 34-36.

Allowable Subject Matter

4. Claims 9, 10, 17-20, 29, 30, 37-40, 48, and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 50-52 are allowed.

Response to Arguments

6. Applicant's arguments with respect to claim 1-8, 12-16, 21-28, 32-36, and 38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

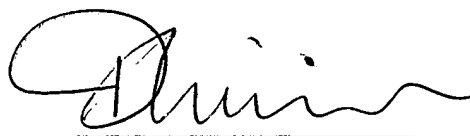
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (571) 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

Date: October 21, 2005

A handwritten signature in black ink, appearing to read 'Phirin', written over a horizontal line.

**PHIRIN SAM
PRIMARY EXAMINER**